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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,779	08/06/2003	Tetsuya Otosaka	SH-0037US	7630

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EXAMINER

LAVILLA, MICHAEL E

ART UNIT	PAPER NUMBER
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1775

MAIL DATE	DELIVERY MODE
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06/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/634,779

Applicant(s)

OTOSAKA ET AL.

Examiner

Michael La Villa

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10,20-28,30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10,20-28,30 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20070504</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 March 2007 has been entered.

Claim Objections

2. Claim 31 is objected to because of the following informalities: Claim 31 should include viscosity units. Appropriate correction is required.
3. Claim 27 is objected to because of the following informalities: Claim 27 repeats the phrase "wherein said." One occurrence should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:
5. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
6. Claims 1-10, 20-28, 30, and 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s),

at the time the application was filed, had possession of the claimed invention.

Support for the claim amendment relating to the outermost portion has been described in applicant's Response as existing at page 12, lines 10-28 of the Specification. This portion of the Specification demands that the viscosity of the outermost portion is $7.6 \log[\text{poise}]$, roughly equal to the viscosity of the inside portion. It is therefore unclear how this portion of the Specification provides support for a limitation that viscosity of the outermost layer is less than V_0 .

Furthermore, it is unclear how this portion of the Specification clarifies support for various layers that have non-constant radial viscosity functions.

7. Claims 1, 2, 6-10, 20-28, 30, and 31 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Silica-based glasses capable of having hydroxyl transmission loss problems are critical or essential to the practice of the invention, as evidenced by the Specification. See Specification (Summary of Invention section). However, this feature is not included in the claim(s), rendering these claims not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). See, also, MPEP 2164.08(c).
8. The following is a quotation of the second paragraph of 35 U.S.C. 112:
9. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
10. Claims 1-10, 20-28, 30, and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Regarding Claims 1, 20, and 31, it is unclear what is meant by the phrase

“disposed at an inner side of the radial direction of a position.” It is unclear where this disposed point is located. What is the “inner side of a radial direction of a position”? Is the disposed point a single position or a range of positions? It is unclear how to understand this position as it supposedly relates to the drawn fiber perform. With respect to Figure 4 in the Specification, does the claimed “inside portion” refer to the “inner clad 32” and does the claimed “outside portion” refer to the “outer clad 34”?

12. Regarding Claims 1, 20, and 31, it is unclear what is meant by the phrases

“maximum value V_0 ” (both occurrences) and “ V_0 ”. It is unclear whether these refer to the same measured quantity. It appears that perhaps the first two occurrences may not be the same measured quantity, despite using the same terminology. With respect to the last occurrence, it is unclear which of the earlier is being referenced. It is unclear whether “maximum” means that the claimed viscosity must not exceed the maximum value or whether it means that the claimed viscosity reaches that maximum value, but not higher. Antecedent basis for V_0 , as mentioned in Claims 6, 8, 9, 30, and 31, is also indefinite.

13. Regarding Claim 2, it is unclear what is the relationship between the viscosity relationships in Claim 1 and those specified in this claim, if any. It is unclear what is the relationship between T_s and the “predetermined temperature,” if any.

14. Regarding Claim 25, it is unclear what is the antecedent basis of the phrases

“inner portion” and “outer portion,” as previous Claim 1 refers to “inside portion,”

"outside portion," and "outermost portion." It is unclear what is the relationship, if any, among the viscosities of these clads and the viscosities of Claim 1.

Analogous rejection applies to Claim 30 with respect to antecedent basis and viscosity relationships. Analogous rejection applies to Claim 27 with respect to the "third viscosity."

15. Regarding Claim 28, it is unclear what is meant by the phrase "diameter of said inner clad layer." It is unclear what is the antecedent basis of "said inner clad layer" as Claim 2 references two such layers. It is unclear what is the diameter of a layer. Is this two times the radial distance from the center of the preform to the innermost surface of the inner clad layer? Analogous rejection with respect to the meaning of layer diameter applies to Claim 30.

Response to Amendment

16. In view of applicant's amendments and arguments, applicant traverses the claim objection of the Office Action mailed on 3 January 2007. Applicant has not apparently amended Claim 31 to provide units, despite mentioning that applicant had done so. Objection is maintained.

17. In view of applicant's amendments and arguments, applicant traverses the section 112, second paragraph rejection of the Office Action mailed on 3 January 2007. Rejections are withdrawn, except to the extent that they may be incorporated above for the reasons given above.

18. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Bachmann of the Office Action mailed on 3 January 2007. Rejection is withdrawn.
19. In view of applicant's amendments and arguments, applicant traverses the section 103 rejection over Bachmann of the Office Action mailed on 3 January 2007. Rejection is withdrawn.
20. In view of applicant's amendments and arguments, applicant traverses the section 103 rejection over Bachmann in view of Rau of the Office Action mailed on 3 January 2007. Rejection is withdrawn.
21. Applicant is advised to use a large type font in applicant's correspondence as the subscripts are otherwise illegible.


Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.
23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1775

24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael La Villa
29 May 2007


MICHAEL E. LAVILLA PH.D.
PRIMARY EXAMINER